REMARKS

Reconsideration of the instant application is respectfully requested. The present amendment is responsive to the Office Action of April 23, 2003, in which claims 1-9 are presently pending. Of those, claims 1, 5-12, and 16-19 have been rejected under 35 U.S.C. §112, first paragraph, as being beyond the scope of the enabling disclosure. Claims 1-19 have further been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention.

With regard to the art of record, claims 1, 5-12, and 16 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,883,432 to Higashiguchi. In addition, claims 2-4 and 13-15 have been rejected under 35 U.S.C. §103(a), as being unpatentable over Higashiguchi, in view of U.S. Patent 6,337,522 to Kang, et al. Finally, claims 6-8 and 17-19 have been rejected under 35 U.S.C. §103(a), as being unpatentable over Higashiguchi. For the following reasons, however, it is respectfully submitted that the application is now in condition for allowance.

Claims 1, 2, 4, 7, 8, 10-13, 15, 18 and 19 have been amended as indicated above so as to overcome the rejections under 35 U.S.C. §112, first and second paragraphs. In this regard, the claims have been amended to more specifically define a conductive polymer composition as comprising (1) a polymer component and (2) an electrically conductive component. Accordingly, the term "conductive" now is clarified as being electrically conductive, while the "polymer composition" is defined as including both a polymer component and an electrically conductive component. In view of these clarifying amendments, it is respectfully submitted that each of the rejections under 35 U.S.C. §112, first and second paragraphs, have been overcome, and should therefore be withdrawn.

With regard to the §102 and §103 rejections based upon the art of record, claims 1 and 12 have been amended to more particularly point out that the interconnection itself is completed prior to its attachment to the first contact pad. Accordingly, those rejections have been overcome for the reason that neither Higashiguchi nor Kang teach or suggest the bonding of a completed interconnection on a first contact pad, wherein the interconnection itself comprises (1) a conductive polymer composition comprising (a) a polymer component and (b) an electrically conductive component, and (2) a first solderable cap, as now recited in each of the pending claims.

Support for this clarification is found at least at page 9, line 8 through page 10, line 13 of the specification, as well as in Figures 4, 5a, 5b and 6a-6d. In particular, page 10, lines 6-9 of the specification states that:

"The technique by which the ***finished interconnection*** is attached to the integrated circuit (IC) substrate and the card will now be described. Referring now to Figure 5a, ***completed interconnections are affixed*** to the IC substrate 62 using conventional solder techniques." (emphasis added)

As indicated by the Examiner in the instant Office action, Higashiguchi discloses bonding metal bumps 4, 6 on printed circuit patterns 3 and electrode pads 5, respectively. (col. 3, lines 1-3 and 21-15). The opposing bumps (identified by the Examiner as the claimed solderable caps) are then bonded to one another by means of an electrically conductive adhesive as described in column 3, lines 62-67 through column 4, lines 1-2 of Higashiguchi. However, as set forth in the pending claims, a completed interconnection is bonded to a first contact pad. Thus, in order for the Higashiguchi reference to anticipate the present claims, the metal bumps would have to be construed as the "completed interconnection", which includes both the conductive polymer composition and the first solderable cap. This is not the case, since only the metal bumps (without any conductive polymer composition) are initially bonded to the contact pad of Higashiguchi.

Because only the metal bumps are initially bonded to the contact pads in Higashiguchi, there is no teaching of bonding a completed interconnection. Even if the electrically conductive adhesive described in Higashiguchi could be construed as the "conductive polymer composition" of the present claims, the adhesive is only applied to the metal bumps after the bumps themselves are attached to their respective surfaces. Thus, Higashiguchi does not disclose the claimed completed interconnection and, as such, both the §102 and §103 rejections have been overcome. It is also noted that the electrically conductive adhesive 50 of the Kang reference is not affixed to the flip chip solder bump 47 to form a completed interconnect, prior to attachment to the chip/bond pad surfaces. Since neither references teach or suggest this features, the claims as presently worded are allowable over the art of record.

For the above stated reasons, it is respectfully submitted that the present application is now in condition for allowance. No new matter has been entered and no additional fees are believed to be required. However, if any fees are due with respect to this Amendment, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,
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